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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/685,068	10/14/2003	Bryan Patrick Flaherty	MASIBP.010C2	4370
20995	7590	09/20/2004	EXAMINER	
KNOBBE MARTENS OLSON & BEAR LLP			NASSER, ROBERT L	
2040 MAIN STREET			ART UNIT	
FOURTEENTH FLOOR			PAPER NUMBER	
IRVINE, CA 92614			3736	

DATE MAILED: 09/20/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/685,068	<b>Applicant(s)</b> FLAHERTY ET AL.	
	<b>Examiner</b> Robert L. Nasser	<b>Art Unit</b> 3736	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 02 August 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) 19, 20 and 23-25 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 13-17 is/are allowed.
- 6) ☒ Claim(s) 1-7, 9, 12, 18, 21, 22 and 26 is/are rejected.
- 7) ☒ Claim(s) 8, 10 and 11 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>2/2/2004</u> . | 6) <input type="checkbox"/> Other: _____  |

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Claims 19, 20, and 23-25 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 8/2/2004.

The examiner notes that applicant has listed claims 23 and 24 as being drawn to the embodiment of figures 8 and 9. However, upon further review of the application, figures 8 and 9 use a 40hz exciter signal and the embodiment of figure 17 uses a signal between 100 and 1000 hz. Therefore claim 23 is withdrawn from consideration. With respect to claim 24, this claim determines the minimum of the velocity signal which is clearly drawn to figure 13.

Claim 5 is objected to because of the following informalities: Claim 5 recites that both the measurement device and the detector are in communication with the external pressure application device. However, claim 1 defines the detector as being part of the measurement device. Therefore, the claim is redundant. Appropriate correction is required.

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 21 and 22 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Specifically, claim 21 positively recites the measurement site, which is part of the human body. The human body cannot be positively recited. Applicant should recite that the elements are adapted to be between the pressure application device and the measurement site.

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The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claim 3 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Claim 3 recites that the processor generates the oscillation signal. However, figure 8 clearly shows a separate processor and oscillator. Since the claims and the specification contradict each other, it is unclear exactly how to make and use the invention.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 2, 4, 6, 7, 18, and 21-23 are rejected under 35 U.S.C. 102 (b) as being anticipated by Tolles 3095872. Tolles shows a device including an oscillator 13 producing a 50-300hz signal (which is about 40 hz) and ending the signal to an exciter 12 which induces the oscillation onto a blood vessel. The system further includes a plethysmograph 14, which senses the oscillation signal after it passes through the blood vessel to detect a signal indicative of arterial volume. The signal is then sent through a

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band pass filter. The examiner notes that a band pass filter is a combination of a high pass and a low pass filter.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 3, 5, and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tolles. Tolles does not teach a processor for controlling the signal processing. However, the examiner takes official notice that at the time applicant filed its invention, the use of processors to control data processing was old and well known. As such, it would have been obvious to modify Tolles to use a processor, as it is merely the substitution of one known processing system for another. The examiner notes that the processor would control the filtering and would be in communication with the conventional blood pressure measuring device for calibrating the system (see column 5, lines 3-7).

Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Tolles in view of Caro et al 5590649. Caro teaches the equivalence of the exciter of Tolles and an acoustic exciter. As such, it would have been obvious to modify Tolles to use an acoustic exciter, as it is merely the substitution of one known equivalent exciter for another.

Claim 26 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ramsey III et al 4349034 in view of Chang et al 5385149. Ramsey teaches in column 2, line 55

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on, that it is known to use an ultrasonic pulse wave detecting device in a blood pressure measuring system. The system has a cuff for inducing a range of pressures over the artery, and an ultrasonic detector for including an oscillating signal into the artery and for detecting a signal indicative of both the oscillation and the pressure. Change t al further teaches that in oscillometric measuring systems like Ramsey, that it is well known that the point of maximum amplitude is determined. Hence, it would have been obvious to modify Ramsey III to identify the point of maximum oscillation and the corresponding pressure.

Claims 8 and 10-11 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 13-17 are allowable.

Claims 8, 10, 11, and 13-17 define over the art of record in that none of the art of record determines the point of zero transmural pressure from the maximum in amplitude of the detected signal, as claimed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert L. Nasser whose telephone number is (703) 308-3251. The examiner can normally be reached on Mon-Fri, variable hours.

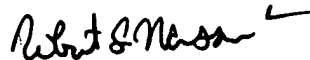
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Max Hindenburg can be reached on (703) 308-3130. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Robert L. Nasser  
Primary Examiner  
Art Unit 3736

RLN  
September 13, 2004



ROBERT L. NASSER  
PRIMARY EXAMINER

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